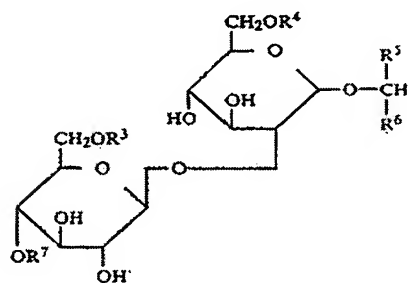


### Claims

1. A detergent composition comprising at least one glycolipid biosurfactant and at least one non-glycolipid surfactant, characterized in that the at least one glycolipid biosurfactant and the at least one non-glycolipid surfactant are in the micellar phase.

2. The detergent composition as claimed in claim 1, characterized in that the glycolipid micellar phase biosurfactant is either a sophorolipid biosurfactant of the formula (I):



(I)

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in which

-R<sup>3</sup> and R<sup>4</sup> are independently from each other H or an acetyl group;

-R<sup>5</sup> is H or a saturated or unsaturated, hydroxylated or non-hydroxylated hydrocarbon group having 1 to 9 carbon atoms ;

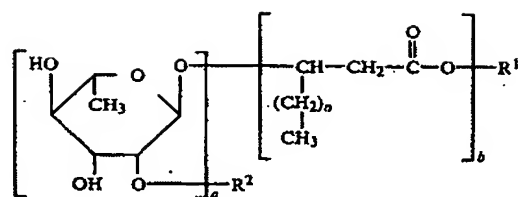
-R<sup>6</sup> is the group R<sup>8</sup>-CO-R<sup>9</sup> or the group R<sup>8</sup>-C(R<sup>10</sup>)-CH<sub>3</sub>

whereby R<sup>8</sup> is a saturated or an unsaturated, hydroxylated or non-hydroxylated, linear or branched hydrocarbon group having 1 to 20 carbon atoms, the total number of carbon atoms in the groups R<sup>5</sup> and R<sup>8</sup> not exceeding 20; R<sup>9</sup> is CH<sub>3</sub> or OH or cation salt thereof, or an O(CH<sub>2</sub>)<sub>m</sub>CH<sub>3</sub> ester thereof with m being an integer between 0 and 3, or a lactone ring formed with R<sup>7</sup>; R<sup>10</sup> is H or OH;

-R<sup>7</sup> is H or a lactone ring formed with R<sup>9</sup>;

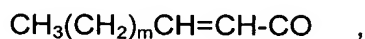
or

a rhamnolipid biosurfactant of the formula (II):



(II)

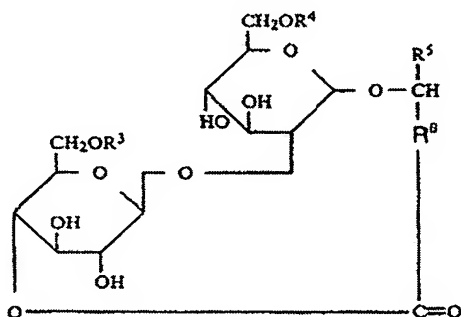
in which a and b independently from each other are 1 or 2, n is an integer from 4 to 10, R<sup>1</sup> is H or a cation, preferably H, R<sup>2</sup> is H or the group



preferably H, m being an integer from 4 to 10, and m and n may be the same or different;

or a combination of the micellar phase sophorolipid and rhamnolipid biosurfactant.

3. The detergent composition as claimed in claim 2, characterized in that the glycolipid micellar phase biosurfactant is a sophorolipid biosurfactant corresponding to the formula (III):



(III)

in which R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> are as defined in formula (I), and whereby at least one of R<sup>3</sup> and R<sup>4</sup> is an acetyl group.

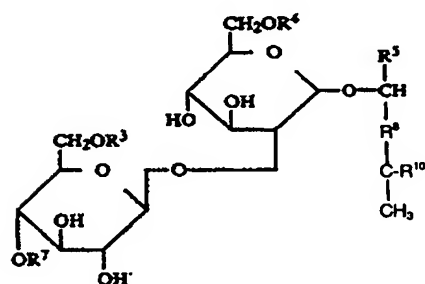
4. The detergent composition as claimed in any one of claims 2-3, characterized in that the glycolipid micellar phase biosurfactant is a sophorolipid biosurfactant and R<sup>5</sup> is a methyl group.

5. The detergent composition as claimed in any one of claims 2-4, characterized in that the glycolipid micellar phase biosurfactant is a sophorolipid biosurfactant whereby R<sup>6</sup> is the group R<sup>8</sup>-CO-R<sup>9</sup> and the total number

of carbon atoms of  $R^5$  and  $R^8$  is from 6 to 20,  $R^5$ ,  $R^6$ ,  $R^8$  and  $R^9$  being as defined in formula (I).

6. The detergent composition as claimed in claim 5, characterized in that  $R^5$  is  $CH_3$  and  $R^8$  is an unsaturated linear hydrocarbon chain having 13-15 carbon atoms or a saturated linear hydrocarbon chain having 6-9 carbon atoms.

7. The detergent composition as claimed in any one of claims 2 or 4, characterized in that the glycolipid micellar phase biosurfactant is a sophorolipid biosurfactant corresponding to the formula:



(IV)

in which  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^8$  and  $R^{10}$  are as defined in formula (I).

8 The detergent composition as claimed in claim 7, characterized in that  $R^5$  is  $CH_3$ ,  $R^{10}$  is H and  $R^8$  is a saturated linear hydrocarbon group having 8-10 carbon atoms.

9. The detergent composition as claimed in any one of claims 2-8, characterized in that the glycolipid micellar phase biosurfactant is a rhamnolipid biosurfactant and n is 6.

10. The detergent composition as claimed in any one of claims 2-9, characterized in that the glycolipid micellar phase biosurfactant is a rhamnolipid biosurfactant and b is 2.

11. The detergent composition as claimed in any one of claims 1-10, characterized in that the non-glycolipid micellar phase surfactant is selected from the group of anionic, cationic, amphoteric and non-ionic surfactants, or a combination thereof.

12. The detergent composition as claimed in any one of claims 1-11, characterized in that the weight ratio of the glycolipid micellar phase biosurfactant to the non-glycolipid micellar phase surfactant is within the range of 1:7 to 10:1.

5 13. The detergent composition as claimed in any one of claims 1-12, characterized in that the weight ratio of the glycolipid micellar phase rhamnolipid biosurfactant to the non-glycolipid micellar phase surfactant is within the range 1:7 to 2:1, preferably 1.25:1 to 1:1.25.

10 14. The detergent composition as claimed in any one of claims 1-12, characterized in that the weight ratio of the glycolipid micellar phase sophorolipid biosurfactant to the non-glycolipid micellar phase surfactant is within the range 1:2 to 10:1 or 1:4 to 4:1, preferably 2:1.

15 15. The detergent composition as claimed in any one of claims 1-14, characterized in that the amount of the glycolipid micellar phase biosurfactant is within the range of 0.05 - 5.0 % by weight with respect to the total weight of the composition.

20 16. The detergent composition as claimed in any one of claims 1-15, characterized in that the amount of the glycolipid micellar phase biosurfactant and non-glycolipid micellar phase surfactant together is from 0.3-30 % by weight with respect to the total weight of the composition.

17. The detergent composition as claimed in any one of claims 1-16, characterized in that the composition further comprises a non-glycolipid surfactant which is in the lamellar phase.

25 18. The detergent composition as claimed in claim 17, characterized in that the lamellar phase non-glycolipid surfactant is an ethoxylated non-ionic surfactant.

19. The detergent composition as claimed in any one of claims 1-18, characterized in that the liquid detergent composition is an aqueous or non-aqueous composition.

30 20. A hard surface cleaning detergent composition comprising an amount of the detergent composition as claimed in any one of claims 1-19.

21. A laundry composition comprising an amount of the detergent composition as claimed in any one of claims 1-19.